

## PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT  
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference RL.P52357WO	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 02/14407	International filing date (day/month/year) 16.12.2002	Priority date (day/month/year) 16.12.2002
International Patent Classification (IPC) or both national classification and IPC H04M15/00		
Applicant TELEFONAKTIEBOLAGET LM ERICSSON (PUBL) et al		

1. This International preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 7 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
- These annexes consist of a total of 2 sheets.
3. This report contains indications relating to the following items:
- I  Basis of the opinion
  - II  Priority
  - III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV  Lack of unity of invention
  - V  Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI  Certain documents cited
  - VII  Certain defects in the international application
  - VIII  Certain observations on the international application

Date of submission of the demand 11.06.2004	Date of completion of this report 15.12.2004
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## **INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

International application No. PCT/EP 02/14407

## I. Basis of the report

1. With regard to the elements of the international application (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)):

**Description; Pages**

1-9 as originally filed

## **Claims, Numbers**

6-10 received on 11.11.2004 with letter of 11.11.2004

1-5 received on 18.11.2004 with letter of 18.11.2004

## **Drawings, Sheets**

1/4-4/4 as originally filed

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
  - the language of publication of the international application (under Rule 48.3(b)).
  - the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

  - contained in the international application in written form.
  - filed together with the international application in computer readable form.
  - furnished subsequently to this Authority in written form.
  - furnished subsequently to this Authority in computer readable form.
  - The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
  - The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

  - the description,      pages:
  - the claims,           Nos.:
  - the drawings,        sheets:

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5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	1-10
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-10
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

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**Reference is made to the following documents:**

- D1: WO 02/052832 A2  
D2: WO 00/38403

**A. Citations and explanations made in respect of paragraph V:**

1. Document **D1** (see in particular abstract; page 3, 2nd paragraph, 1st sentence, in combination with page 1, 2nd paragraph, sentences 1 and 2; page 3, 3rd paragraph; page 4, 2nd paragraph; page 5, 2nd paragraph), which is considered to represent the most relevant state of the art, discloses according to the essential features of present **claim 1**,

a method of negotiating a cost sharing formula associated with a communication service between a plurality of participants (see in particular page 3, 2nd paragraph, 1st sentence, in combination with page 1, 2nd paragraph, sentences 1 and 2)

- sending a message from a terminal used by a first of the participants to terminals used by the or each other participants containing a cost sharing request (see in particular page 3, 3rd paragraph, 1st sentence); and
- at the or each other terminal receiving said message, processing the request using predefined cost sharing rules and/or receiving user inputs relating to the request (see in particular page 3, 3rd paragraph, 3rd sentence), and sending a response message to first participant's terminal containing a result (see in particular page 3, 3rd paragraph, 4th sentence),
- the participants being charged by the network(s) (see in particular page 5, 2nd paragraph) in accordance with the formula.

The subject-matter of present amended claim 1 differs therefrom, in that

- a)** the method is based upon the Session Initiation Protocol (SIP), and
- b)** the step of configuring one or more Session Initiation Protocol servers to intercept Session Initiation Protocol messages for the purpose of determining the negotiated cost sharing formula.

**With respect to difference a)**

In one embodiment (see page 3, 3rd paragraph) D1 discloses that the cost sharing request is sent in the first message of the call setup signalling and discloses further, that details would be dependent on the service and the

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controlling protocol, e.g. SIP (see in page 5, 5th paragraph).

Furthermore, D1 discloses in particular that during a call setup or during a change in connection the negotiation phase can be invoked (page 3, 2nd paragraph). It thus is obvious, that the users request for a cost sharing request would be contained in the first SIP protocol message.

Difference a) is therefore implicitly disclosed by D1.

**With respect to difference b)**

D1 discloses (see in particular page 3, 3rd paragraph to page 4, 2nd paragraph to page 5, 5th paragraph, 2nd sentence), that the access is only granted, when the proposed contract contained in the cost share request is authorised by the Billing Agent responsible for the particular user. Therefor, the user (actually the users device UE) or a user agent inform the billing agent and the access agent about the result of the negotiation. The person skilled in the art would consider these billing agents and access control agents according to the above mentioned Session Initiation Protocol as SIP servers. The disclosed Billing Agent in D1 is considered as a SIP server, determining the negotiated cost sharing formula.

The remaining different feature out of a.m. difference b) then is the way, how the SIP server gets the information about the negotiated cost sharing formula.

In this respect D1 discloses that the negotiated information is sent to the SIP servers (i.e. the billing agent or the access controlling agent), whereas in present claim 1 the SIP server/s is/are configured to intercept SIP messages in order to determine the negotiated cost formula.

The objective technical problem to be solved therefore is considered as to provide an alternative for the way how the SIP server learns about the cost share negotiation information.

To the person skilled in the art it is obvious, that such a SIP based cost share negotiation solution would need to inform the relevant SIP server or servers about the negotiated result in order to control the feature and allow a related billing or charging. It therefore appears obvious, that if the selected cost share negotiation information is not sent automatically to the SIP server/s (see "3a", "3b", "4a", "4b" in Fig. of D1), the SIP server/s would need to track all signalling in order to determine the relevant signalling information for the control of the feature and to extract the necessary information. The person skilled in the art would understand that therefor all signalling would need either to be routed via (or copied to) such

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SIP servers to allow a feature control by those SIP servers, the SIP servers obviously intercepting only the relevant signalling messages.

The step of intercepting SIP signalling in order to determine the negotiated cost sharing formula therefore is considered the obvious complementary alternative to the sending of cost share information to SIP server/s.

The subject-matter of claim 1 therefore does not involve an inventive step, **Article 33(3) PCT**.

2. The same considerations as made for claim 1 are also valid for independent **claims 8 and 10**, since these claims include the similar feature combination as claim 1 in terms of the corresponding terminal apparatus claim (claim 8) and the corresponding server apparatus claim (claim 10).  
The subject-matter of **claims 8 and 10** therefore does not present an inventive step either, **Article 33(3) PCT**, for the same reasons as given in above point 1.
3. Furthermore, dependent **claims 2 to 7 and 9** do not appear to contain any additional features which, in combination with the features of any claim to which they refer, involve an inventive step as the subject-matter of said claims is either in principle derivable from the disclosure of document D1 (for **claim 3**: response to cost sharing proposal: see in particular page 3, 3rd paragraph, 3rd and 4th sentences; for **claim 4**: receiving terminal proposes alternative or modified cost proposal: see in particular page 6, 3rd paragraph; for **claim 5**: three or more participants: implied by page 1, 2nd paragraph, 2nd sentence; and by page 6, 2nd paragraph, last sentence "bilateraler oder multilateraler Abkommen"; for **claim 6**: time of negotiation: see in particular page 3, 2nd paragraph, 2nd sentence [see also D2, page 6, lines 1 to 7]; for **claim 7**: 3GPP IP Multimedia Subsystem: implied by Page 1, 2nd paragraph "Multimedia Session"; for **claim 9**: a mobile wireless terminal being implied by the 3GPP standard mentioned in D1) or of document D2 (for **claim 2**: either calling or called party is permitted to start the service for reverse charging, the invocation principle being obviously also applicable for the negotiation: see page 3, line 26 to page 4, line 12 and page 6, lines 1 to 7) represents simple design details which are generally known to the person skilled in the field of Multimedia services and its related charging.  
Dependent **claims 2 to 7 and 9** therefore do not meet the requirements of Article

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33(3) PCT.

**B. Certain defects of the application**

1. Contrary to the requirements of Rule 5.1 (a) (ii) PCT, the documents **D1 to D2**, which represent a relevant state of the art with regard to the present invention, are not identified in the opening part of the description and thus the relevant background art disclosed therein is not briefly discussed.
2. The opening part of the description is not **brought into conformity** with the wording of any new or amended claim(s), Rule 5.1 (a) (iii) PCT.
3. Contrary to the requirements of Rule 6.3 (b) PCT, **none of the independent claims** is cast in the **two-part form**, with those features which in combination are part of the nearest prior art (e.g. document D1) being placed in the preamble.
4. **Reference signs** in parentheses are not inserted in all claims to increase their intelligibility, Rule 6.2 (b) PCT. This applies both to the preamble and to the characterizing portion.